

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1 1. (Currently amended) A system for enabling components to transfer
2 data between each other, the system comprising:
 - 3 a plurality of components including a first component having a universal
4 data transfer interface; and
 - 5 a second component capable of invoking the universal data transfer
6 interface to cause a data transfer session object (DTSO) to be sent to at least one
7 of the plurality of components when the at least one of the plurality of
8 components has data to transfer to another component from the plurality of
9 components, wherein the second component can be an intermediary component,
10 which facilitates transferring of the DTSO from the first component to the at least
11 one of the plurality of components;
 - 12 wherein the DTSO is capable of being invoked by the at least one of the
13 plurality of components to transfer data between the first component and the at
14 least one of the plurality of components;
 - 15 wherein the DTSO includes instructions to return data types supported by
16 the first component;
 - 17 wherein the DTSO includes instructions that enable the first component to
18 receive asynchronous event notifications;
 - 19 wherein the DTSO includes instructions to return device type and
20 operating status of the first component; and

21 wherein the DTSO includes instructions to enable the first component or
22 the at least one of the plurality of components to negotiate with each other to
23 select a transfer medium to use to transfer data based upon the type of data.

1 2. (Previously presented) The system as set forth in claim 1 wherein the at
2 least one of the plurality of components comprises the second component or a
3 third component.

1 3. (Previously presented) The system as set forth in claim 1 wherein the at
2 least one of the plurality of components sends a second DTSO to the first
3 component to be used by the first component for receiving data transmitted from
4 the at least one of the plurality of components.

1 4. (Previously presented) The system as set forth in claim 1 wherein the at
2 least one of the plurality of components receives the DTSO from the first
3 component to be used by the at least one of the components for receiving data
4 transmitted from the first component.

1 5. (Previously presented) The system as set forth in claim 1 wherein the
2 universal data transfer interface and the DTSO have source-specific object-
3 oriented mobile code that can be interpreted and performed by the first component
4 or the at least one of the plurality of components.

1 6. (Previously presented) The system as set forth in claim 1 wherein the
2 DTSO comprises instructions to enable the first component or the at least one of
3 the plurality of components to negotiate with each other to transfer data, to select
4 a communications protocol configured to transfer data between each other based

5 upon a type of data to be transferred.

1 7. (Previously presented) The system as set forth in claim 1 wherein the
2 DTSO is configured to indicate completion responsive to expiration of a data
3 transfer lease by the first component or by the at least one of the plurality of
4 components or responsive to the first component or to the at least one of the
5 plurality of components indicating that the data transfer has completed or failed.

1 8. (Currently amended) A system for enabling components to transfer data
2 between each other, the system comprising:
3 a first component having a first universal data transfer interface;
4 a second component having a second universal data transfer interface; and
5 a third component invoking the first universal data transfer interface and
6 the second universal data transfer interface to use a data transfer session object
7 (DTSO) to transfer data between the first component and the second component
8 when the first component has data to transfer to the second component, wherein
9 the third component can be an intermediary component, which facilitates
10 transferring of the DTSO from the first component to the at least one of the
11 plurality of components;
12 wherein the DTSO includes instructions to return data types supported by
13 the first component;
14 wherein the DTSO includes instructions that enable the first component to
15 receive asynchronous event notifications;
16 wherein the DTSO includes instructions to return device type and
17 operating status of the first component; and

18 wherein the DTSO includes instructions to enable the first component or
19 the at least one of the plurality of components to negotiate with each other to
20 select a transfer medium to use to transfer data based upon the type of data.

1 9. (Previously presented) The system as set forth in claim 8 wherein the
2 third component sends the DTSO to the first component to be used by the first
3 component for receiving data transmitted from the second component.

1 10. (Previously presented) The system as set forth in claim 8 wherein the
2 third component sends the DTSO to the second component to be used by the
3 second component for receiving data transmitted from the first component.

1 11. (Previously presented) The system as set forth in claim 8 wherein the
2 DTSO is configured to indicate completion responsive to expiration of a data
3 transfer lease by the first component or the at least one of the plurality of
4 components, or responsive to the first component or the at least one of the
5 plurality of components indicating that the data transfer has completed or failed.

1 12. (Currently amended) A method for enabling a plurality of
2 components to transfer data between each other, the method comprising:
3 invoking, with a second component, a universal data transfer interface of a
4 first component of a plurality of components to cause a data transfer session
5 object (DTSO) to be sent to at least one of the plurality of components, wherein
6 the second component can be an intermediary component, which facilitates
7 transferring of the DTSO from the first component to the at least one of the
8 plurality of components; and

9 invoking the DTSO with the at least one of the plurality of components to
10 transfer data between the first component and the at least one of the plurality of
11 components when the first component has data to transfer to the at least one of the
12 plurality of components;
13 wherein the DTSO includes instructions to return data types supported by
14 the first component;
15 wherein the DTSO includes instructions that enable the first component to
16 receive asynchronous event notifications;
17 wherein the DTSO includes instructions to return device type and
18 operating status of the first component; and
19 wherein the DTSO includes instructions to enable the first component or
20 the at least one of the plurality of components to negotiate with each other to
21 select a transfer medium to use to transfer data based upon the type of data.

1 13. (Previously presented) The method as set forth in claim 12 wherein the
2 at least one of the plurality of components comprises the second component or a
3 third component.

1 14. (Previously presented) The method as set forth in claim 12 further
2 comprising sending a second DTSO to the first component to be used by the first
3 component for receiving data transmitted from the at least one of the plurality of
4 components.

1 15. (Previously presented) The method as set forth in claim 12 further
2 comprising receiving the DTSO from the first component to be used by the at
3 least one of the components for receiving data transmitted from the first
4 component.

1 16. (Previously presented) The method as set forth in claim 12 wherein the
2 universal data transfer interface and the DTSO have source-specific object-
3 oriented mobile code that can be interpreted and performed by the first component
4 or the at least one of the plurality of components.

1 17. (Previously presented) The method as set forth in claim 12 wherein the
2 DTSO comprises instructions to enable the first component or the at least one of
3 the plurality of components to negotiate with each other to transfer data, to select
4 a communications protocol configured to transfer data between each other based
5 upon a type of data to be transferred.

1 18. (Previously presented) The method as set forth in claim 12 further
2 comprising configuring the DTSO to indicate completion responsive to expiration
3 of a data transfer lease by the first component or by the at least one of the plurality
4 of components, or responsive to the first component or to the at least one of the
5 plurality of components indicating that the data transfer has completed or failed.

1 19. (Currently amended) A method for enabling components to
2 transfer data between each other, the method comprising:
3 invoking a first universal data transfer interface of a first component and a
4 second universal data transfer interface of a second component when the first
5 component has data to transfer to the second component, wherein the second
6 component can be an intermediary component, which facilitates transferring of the
7 DTSO from the first component to the at least one of the plurality of components;
8 obtaining a data transfer session object (DTSO) from one of the invoked
9 first universal data transfer interface or the second universal data transfer
10 interface; and

11 using the DTSO to transfer data between the first component and the
12 second component;
13 wherein the DTSO includes instructions to return data types supported by
14 the first component;
15 wherein the DTSO includes instructions that enable the first component to
16 receive asynchronous event notifications;
17 wherein the DTSO includes instructions to return device type and
18 operating status of the first component; and
19 wherein the DTSO includes instructions to enable the first component or
20 the at least one of the plurality of components to negotiate with each other to
21 select a transfer medium to use to transfer data based upon the type of data.

1 20. (Previously presented) The method as set forth in claim 19 further
2 comprising sending the DTSO to the first component to be used by the first
3 component for receiving data transmitted from the second component.

1 21. (Previously presented) The method as set forth in claim 19 further
2 comprising sending the DTSO to the second component to be used by the second
3 component for receiving data transmitted from the first component.

1 22. (Previously presented) The method as set forth in claim 19 further
2 comprising configuring the DTSO to indicate completion responsive to expiration
3 of a data transfer lease by the first component or by the at least one of the plurality
4 of components, or responsive to the first component or to the at least one of the
5 plurality of components indicating that the data transfer has completed or failed.

1 23. (Currently amended) A computer readable medium having stored

2 thereon instructions for enabling components to transfer data between each other,
3 which when executed by one or more processors, causes the processors to
4 perform:
5 invoking, with a second component, a universal data transfer interface of a
6 first component of a plurality of components to cause a data transfer session
7 object (DTSO) to be sent to at least one of the plurality of components when the
8 first component has data to transfer to at least one of the plurality of components,
9 wherein the second component can be an intermediary component, which
10 facilitates transferring of the DTSO from the first component to the at least one of
11 the plurality of components; and
12 invoking the DTSO with the at least one of the plurality of components to
13 transfer data between the first component and the at least one of the plurality of
14 components;
15 wherein the DTSO includes instructions to return data types supported by
16 the first component;
17 wherein the DTSO includes instructions that enable the first component to
18 receive asynchronous event notifications;
19 wherein the DTSO includes instructions to return device type and
20 operating status of the first component; and
21 wherein the DTSO includes instructions to enable the first component or
22 the at least one of the plurality of components to negotiate with each other to
23 select a transfer medium to use to transfer data based upon the type of data.

1 24. (Previously presented) The medium as set forth in claim 23 wherein
2 the at least one of the plurality of components comprises the second component or
3 a third component.

1 25. (Previously presented) The medium as set forth in claim 23 further
2 comprising sending a second DTSO to the first component to be used by the first
3 component for receiving data transmitted from the at least one of the plurality of
4 components.

1 26. (Previously presented) The medium as set forth in claim 23 further
2 comprising receiving the DTSO from the first component to be used by the at
3 least one of the components for receiving data transmitted from the first
4 component.

1 27. (Previously presented) The medium as set forth in claim 23 wherein
2 the universal data transfer interface and the DTSO have source-specific object-
3 oriented mobile code that can be interpreted and performed by the first component
4 or the at least one of the plurality of components.

1 28. (Previously presented) The medium as set forth in claim 23 wherein
2 the DTSO comprises instructions to enable the first component or the at least one
3 of the plurality of components to negotiate with each other to transfer data, to
4 select a communications protocol configured to transfer data between each other
5 based upon a type of data to be transferred.

1 29. (Previously presented) The medium as set forth in claim 23 further
2 comprising configuring the DTSO to indicate completion responsive to expiration
3 of a data transfer lease by the first component or by the at least one of the plurality
4 of components, or responsive to the first component or to the at least one of the
5 plurality of components indicating that the data transfer has completed or failed.

1 30. (Currently amended) A computer readable medium having stored
2 thereon instructions for enabling components to transfer data between each other,
3 which when executed by one or more processors, causes the processors to
4 perform:
5 invoking a first universal data transfer interface of a first component and a
6 second universal data transfer interface of a second component when the first
7 component has data to transfer to the second component, wherein the second
8 component can be an intermediary component, which facilitates transferring of the
9 DTSO from the first component to the at least one of the plurality of components;
10 obtaining a data transfer session object (DTSO) from one of the invoked
11 first universal data transfer interface or the second universal data transfer
12 interface; and
13 using the DTSO to transfer data between the first component and the
14 second component;
15 wherein the DTSO includes instructions to return data types supported by
16 the first component;
17 wherein the DTSO includes instructions that enable the first component to
18 receive asynchronous event notifications;
19 wherein the DTSO includes instructions to return device type and
20 operating status of the first component; and
21 wherein the DTSO includes instructions to enable the first component or
22 the at least one of the plurality of components to negotiate with each other to
23 select a transfer medium to use to transfer data based upon the type of data.

1 31. (Previously presented) The medium as set forth in claim 30 further
2 comprising sending the DTSO to the first component to be used by the first
3 component for receiving data transmitted from the second component.

1 32. (Previously presented) The medium as set forth in claim 30 further
2 comprising sending the DTSO to the second component to be used by the second
3 component for receiving data transmitted from the first component.

1 33. (Previously presented) The medium as set forth in claim 30 further
2 comprising configuring the DTSO to indicate completion responsive to expiration
3 of a data transfer lease by the first component or by the at least one of the plurality
4 of components, or responsive to the first component or to the at least one of the
5 plurality of components indicating that the data transfer has completed or failed.